

NEW SYL
E 1-3

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 10188957
PUBLICATION DATE : 21-07-98
APPLICATION DATE : 20-12-96
APPLICATION NUMBER : 08355330

INVALID INT

APPLICANT : SANYO ELECTRIC CO LTD;

INVENTOR : NISHIO KOJI;

INT.CL. : H01M 4/02 H01M 4/62 H01M 10/40

TITLE : LITHIUM SECONDARY BATTERY

ABSTRACT : PROBLEM TO BE SOLVED: To provide a battery having an excellent charge and discharge cycle characteristic by adding and mixing inorganic porous grain powder, which can hold electrolyte in holes thereof, to with the carbon material as a lithium ion storing material in a negative electrode.

SOLUTION As inorganic porous grain powder, each grain powder of silica gel, alumina and silica alumina is used, and used as one kind or mixture of two kind or more. Powder having specific surface area at 100m²/g or more has an excellent property for holding an electrolyte. This powder is desirably added at 0.5-10wt. parts in relative to the carbon material at 100wt. parts. In the case where such a powder is added to the carbon material of a negative electrode, the electrolyte is evenly distributed in the negative electrode. As a result, charge and discharge reaction is evenly performed, and partial deterioration of the carbon material at the time of charge an discharge cycle becomes hard to be generated.

COPYRIGHT: (C)1998,JPO